

Material Safety Data Sheet



KERR-MCGEE CHEMICAL CORPORATION
KERR-MCGEE CENTER ■ OKLAHOMA CITY OKLAHOMA 73125

⇒ Mayev
see email from **ammonium perchlorate**
Brittle.

For more detailed information on the hazards of this product, contact Regulations Compliance Department or Medical Services Department at the address above. Technical Information Bulletin is also available. For emergency information, telephone (405) 270-1313 any time.

PRODUCT IDENTIFICATION

Brand Name KM ammonium perchlorate
Chemical Name Ammonium perchlorate
Common Name Ammonium perchlorate
Formula NH_4ClO_4
DOT Proper
Shipping Name Ammonium perchlorate
DOT Hazard
Class Oxidizer
DOT I.D. Number UN 1442
Reportable Quantity (RQ) 100 pounds (45.4 kg)
CAS Number 7790-98-9

PHYSICAL AND CHEMICAL PROPERTIES

State Granular crystals
Melting Point C 450 (decomposes)
Boiling Point C Not applicable
Color White
Odor None
Bulk Density, lb/cu. ft 65 (50 micron)
Weight Per Gallon Not applicable
Specific Gravity 1.85
Water Solubility, % by wt. @ 25C ..20
Flash Point And Method Not applicable
pH Not applicable

HAZARDOUS INGREDIENTS

Chemical Name	Common Name	CAS Number	Hazard
Ammonium perchlorate	Ammonium perchlorate	7790-98-9	Strong oxidizer - when mixed with other materials may cause fire. Minor irritant.

PHYSICAL HAZARD INFORMATION

Explosive: No Upper Explosive Limit: Not applicable Lower Explosive Limit: Not applicable
Pyrophoric: No
Flammable: No Flammability Class: Not applicable
Combustible: No Organic Peroxide: No
Oxidizer: Yes Compressed Gas: No
Reactivity: Stable in pure form below 55.6C (130F). Decomposes at higher temperatures.

Incompatibilities: DANGER! Strong oxidizer — contact with combustibles or oxidizable material constitutes an extreme fire and explosion hazard.

Hazardous Decomposition: Thermal (heat) decomposition may release toxic and hazardous fumes of chlorine, hydrogen chloride, ammonia and oxides of nitrogen.

Conditions to Avoid: Mixing with or exposing to explosives, flammable materials, acids, sulfur, phosphorus, metal powders and other oxidizable materials, heat or fire.

Note: This product contains a chemical that is known to the state of California to cause cancer. See page 2.

HEALTH INFORMATION

Precautionary Information: Ammonium perchlorate is a mild irritant to the skin, eyes, mucous membranes and the digestive tract.

Symptoms Of Exposure: Redness of the eyes or skin
Sensitivity or irritation of mucous membranes.
Digestive tract irritation or disorder.

Restrictive Medical Conditions: Eye or skin disease, breathing or respiratory disorders and digestive tract disorders would be aggravated by exposure to this chemical.

PRIMARY ROUTE(S) OF ENTRY

Inhalation (breathing), ingestion (swallowing).

PROPOSITION 65

The State of California has determined in accordance with the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) that hexavalent chromium poses a significant risk of cancer when more than 0.001 microgram (one one-billionth of a gram) per day could be inhaled.

TOXICITY INFORMATION

The material has exhibited a lethal dose of 4200 mg in rats and 1900 mg in rabbits (a dose that would kill 50% of the test animals, assumed to be measured per kilogram of body weight for the animal tested.) To our knowledge no data has been reported for humans.

WARNING: This product contains a chemical known to the State of California to cause cancer.

EXPOSURE LIMITS

OSHA: Not established.

ACGIH: Not established.

Other: ACGIH-TLV-TWA for nuisance dust is 10 mg/m³ or 5 mg/m³ respirable dust.

Reported As A Potential Carcinogen
Or Carcinogen

☒ Not Applicable
☐ OSHA

☐ National Toxicology Program
☐ International Agency For Research On Cancer

PRECAUTIONS FOR SAFE HANDLING AND USE

Inadvertant contact between ammonium perchlorate and organics may be explosive. Ammonium perchlorate can be detonated by sympathetic (induced) pathways. Clothing and organic materials contaminated with ammonium perchlorate or its solutions are dangerously flammable. Keep from contact with clothing and other combustible materials. Immediately remove and wash contaminated clothing. Do not wear leather shoes, gloves or belts. Store separately and keep from contact with explosives, flammable/combustible materials, acids, sulfur, phosphorus, metal powders and other oxidizable materials. Store in original tightly closed container. Keep away from fire. Do not smoke when handling ammonium perchlorate. Do not drop, skid or slide containers of ammonium perchlorate. Avoid breathing dust, avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Always have a water filled jump tank or deluge shower in immediate work area. If your clothing catches fire, do not use a fire blanket. Use the jump tank or deluge shower.

SPILL AND LEAK PROCEDURES

Soil Release: Scoop up and place in metal container. Do not mix with combustible materials. Dispose of as a hazardous waste under federal, state and local regulations.

Water Spill: Absorb with a noncombustible absorbent (vermiculite). Place in a metal container and dispose of as above.

Air Spill: Not applicable. Dispose of settled dust as under "Soil Release".

Occupational Spill: Keep combustibles (wood, paper, oil, etc.), away from spilled material. Scoop up and place in metal container. Dispose of as outlined under "Soil Release" above.

RCRA Waste Number: D001.

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation: Provide local exhaust or general ventilation system. Do not allow accumulation of dust on pipes, structural members or walkways.

Respirator: Use NIOSH/MSHA approved dust mask appropriate for nuisance dust.

Eye Protection: Wear safety glasses or goggles. Ensure eyewash fountain is located in immediate work area.

Gloves: Use gloves that will not allow the product to penetrate.

Clothing: Wear easily washable clothing and rubber boots or shoes. Wash clothing after each shift. If clothing becomes contaminated, keep wet until washed. Do not wear leather shoes, gloves or belts. If leather is inadvertently contaminated, do not reuse; discard as hazardous, flammable articles.

EMERGENCY PROCEDURES

Fire: Keep unnecessary people away; isolate hazard area and deny entry.
Wear self-contained breathing apparatus and full protective clothing.
For small fires use water spray or foam. For large fires use water spray or foam. Do not move containers if exposure to heat has occurred. Cool containers exposed to flames with water from the side until well after fire is out. For a massive fire in a storage area use an unmanned hose holder or monitor nozzles; if this is impossible, withdraw from the area and let the fire burn.

Spill or Leak: For small spills take up with sand or other noncombustible absorbent material and place in metal containers for later disposal.
For large spills dike the spill area for later disposal.
Disposal must be done in accordance with federal, state and local regulations.

FIRST AID PROCEDURES

Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician.

Inhalation: If inhaled, remove to fresh air.

Skin Contact: Flush skin with plenty of water and then wash with soap and water.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Note To Physician: Chemical of exposure is ammonium perchlorate, a mild gastric irritant.